Remarks

The specification has been amended in order to incorporate the proper priority information for the captioned application. In addition, the specification has been amended to correct inadvertent typographical errors. Specifically, the specification has also been amended to correct obvious typographical errors in the amount of ingredients listed for 5x SSC (sodium chloride/sodium citrate) and the concentration of salmon sperm DNA used in stringent hybridization. An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of the error in the specification, but also the appropriate correction. (M.P.E.P. 2163.07) Here, the recognition of the typographical errors, along with the correction of the errors, in the amount of the ingredients listed for 5x SSC and in the concentration of salmon sperm DNA used in the hybridization, are obvious to one skilled in the art, and therefore, the correction does not constitute new matter. A 5x SSC is a well known solution used in hybridization solutions. *See*, e.g., Exhibit A, CURRENT PROTOCOLS IN MOLECULAR BIOLOGY, John Wiley and Sons, N.Y., page 2.10.7 (1987). SSC is normally made as a 20x stock solution, and then diluted accordingly for a particular use. Exhibit B shows that a 20x SSC stock solution contains 3M NaCl and 0.3M trisodium citrate. (Exhibit B, CURRENT PROTOCOLS IN MOLECULAR BIOLOGY, John Wiley and Sons, N.Y., page A.2.5. (1987)). To make a 5x SSC solution, the 20x SSC solution must be diluted by one-forth. Therefore, a 5x SSC solution contains 750mM NaCl (3M ÷ 4 = 750mM) and 75mM trisodium citrate (0.3M ÷ 4 = 75mM).

One skilled in the art would have immediately recognized that the amount of ingredients listed in the specification for a 5x SSC solution was incorrect. Rather than describing a 5x SSC solution, made up of 750mM NaCl and 75mM trisodium citrate, the specification inaccurately listed the ingredients for a 1x SSC solution. The skilled artisan, in recognizing the typographical error, could easily have adjusted the amount of ingredients described in the specification to properly make a 5x SSC solution.

Likewise, the relative amount of salmon sperm DNA to be used in a hybridization is well known (See, *e.g.*, Exhibit A). Exhibit A shows that a hybridization solution typically contains about 100 µg/ml salmon sperm DNA. One skilled in the art would have immediately recognized that the

concentration of salmon sperm DNA was incorrect in the specification, as it recited 20 g/ml, an exponentially larger concentration than 100 μg/ml. The skilled artisan, in recognizing the typographical error, could have adjusted the concentration of salmon sperm DNA accordingly.

Therefore, because no new matter will be added to the specification if these typographical errors are corrected, Applicants respectfully request that the amendments to the specification to recite the correct amount of ingredients for a 5x SSC solution and concentration of salmon sperm DNA be entered.

Claims 1-16 have been cancelled without prejudice or disclaimer of the subject matter therein. Applicants reserve the right to pursue the subject matter of the cancelled claims in continuing applications. Claims 17-116 have been newly added. Support for the claims can be found throughout the specification and original claims. Specifically, support for claims 17-25 and 39-44 can be found, *inter alia*, at page 23, line 4 to page 24, line 9. Support for claims 31-33, 50 and 56 can be found, *inter alia*, at page 21, line 1 to page 22, line 11. Support for claims 62-71 can be found, *inter alia*, at page 25, lines 11-24. Support for claims 77-78 and 110-111 can be found, *inter alia*, at page 20, lines 13-16 and page 23, lines 12-13. Support for claims 84-87 and 93-96 can be found, *inter alia*, at page 20, lines 13-16; page 21, lines 1-14; and page 23, lines 12-13. Support for claims 102-104 can be found, *inter alia*, at page 12, line 24 to page 13, line 2. Support for claims 26-27, 29-30, 34-35, 37-38, 45-46, 48-49, 51-52, 54-55, 57-58, 60-61, 72-73, 75-76, 79-80, 82-83, 88-89, 91-92, 97-98, 100-101, 105-106, 108-109, 112-113, and 115-116 can be found, *inter alia*, at page 17, line 20 to page 20, line 11. Support for claims 28, 36,47, 53, 59, 74, 81, 90, 99, 107, and 114 can be found, *inter alia*, at page 31, lines 1-26.

Upon entry of the forgoing amendments, claims 17-116 are pending in the application with claims 17, 31, 39, 50, 56, 62, 77, 84, 93, 102, and 110 being the independent claims.

Conclusion

Applicants believe that this application is now in condition for substantive examination.

Early notice to this effect is respectfully requested. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Attorney Reg. No. 47,473

Eric K. Steffe
Attorney for Applicants
Registration No. 36,688

Date: July 9, 2001

1100 New York Avenue, N.W.
Suite 600
Washington, D.C. 20005-3934
(202) 371-2600

Versions with Markings to show changes made

In the claims:

Claims 1-16 have been cancelled.

Claims 17-116 have been newly added.

In the Specification:

The paragraph beginning at page 1, line 4:

The present application is a divisional of United States Appl. No. 08/994,962, filed December 19, 1997 (now allowed), which is hereby incorporated by reference, said 08/994,962 [This application hereby] claims priority benefit to provisional United States Appl. No. 60/033,869, filed December 20, 1996, which is hereby incorporated by reference and provisional United States Appl. No. 60/037,388, filed February 7, 1997, which [are]is hereby incorporated by reference.

The paragraph beginning at page 12, line 24:

In another aspect, the invention provides an isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a portion of the polynucleotide in a nucleic acid molecule of the invention as described above, for instance, the cDNA clone deposited with the ATCC on December 16, 1996 (ATCC Deposit No. 97825). By "stringent hybridization conditions" is intended overnight incubation at 42°C in a solution comprising: 50% formamide, 5x SSC ([150]750 mM NaCl, [15]75 mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 μg/ml denatured, sheared salmon sperm DNA, followed by washing the filters in 0.1x SSC at about 65°C.